

## **National Science Standards (K-12)**

The standards are from: National Research Council. National Science Education Standards. National Academy Press: Washington D.C., 1996.

### **Standard A - Science as Inquiry**

The standard includes the processes of science and requires that students combine processes and scientific knowledge as they use scientific reasoning and critical thinking to develop their understanding of science.

### **Standard B - Physical Science**

The standard focuses on the science facts, concepts, principles, theories, and models that are important for the student to know, understand, and use. Specific areas of knowledge depend on the grade, but may include properties of objects, motion, heat, light, electricity, magnetism, forces, energy, atoms, and chemical reactions.

### **Standard C - Life Science**

The standard focuses on the science facts, concepts, principles, theories, and models that are important for the student to know, understand and use. Specific areas of knowledge depend on the grade, but may include organisms, life cycles, environments, reproduction, ecosystems, the cell, and evolution.

### **Standard D - Earth and Space Science**

The standard focuses on the science facts, concepts, principles, theories, and models that are important for the student to know, understand and use. Specific areas of knowledge depend on the grade, but may include earth materials, the sky, earth systems, earth's history, solar system, and geochemical cycles.

### **Standard E - Science and Technology**

The standard establishes connections between the natural and designed worlds and provides students with opportunities to develop decision-making abilities. It emphasizes abilities associated with the process of design and fundamental understandings about the enterprise of science and its various linkages with technology.

### **Standard F - Science in Personal and Social Perspectives**

The standard gives students a way to understand and act on personal and social issues. It helps students develop decision-making skills, and it gives them a foundation on which to base decisions they will face as citizens.

### **Standard G - History and Nature of Science**

The standard helps students understand that science reflects its history and is an ongoing, changing enterprise. It clarifies different aspects of scientific inquiry, the human aspects of science, and the role that science has played in the development of various cultures.